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10/671,128

09/24/2003

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EXAMINER

BILGRAMI, ASGHAR H

ART UNIT

PAPER NUMBER

2443

MAIL DATE

DELIVERY MODE

11/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/671,128 | Applicant(s) WISE ET AL. | |
| | Examiner ASGHAR BILGRAMI | Art Unit 2443 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/3/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12. Claims 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12. Claims 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Amendment made by the applicant to the specification on 11/9/2007 has been entered by the examiner.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

3. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

4. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1 & 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Applications No. 10/671,203 and claim 1 of copending Applications No.10/671,204. Although the conflicting claims are not identical, they are not patentably distinct from each other because.

6. As to claim 1, claim 1 of the co-pending application (10/671,204) show a method, comprising: providing a link transmitter having a plurality of logical channels (claim 1); providing a link receiver coupled to the link transmitter; the link receiver providing a plurality of data credits to the link transmitter (claim 1); the link transmitter transmitting a packet to the link receiver, wherein the link transmitter takes the packet from one of the plurality of logical channels, and wherein the link transmitter selects from which of the plurality of logical channels to draw the packet (claim 1); diminishing the plurality of data credits as the packet is transmitted (claim 1); the link receiver storing the packet in a plurality of receiver buffers (claim 1); the link receiver updating the plurality of data

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credits (claim 1); and the link transmitter allocating the plurality of data credits among the plurality of logical channels (claim 1)

7. For the similar claim language claim 1 of copending application 10/671,203 is also not patentably distinct from claim 1 of this application.

8. As to claim 10, claim 1 the co-pending application (10/671,204) show a method comprising: the link receiver providing a plurality of data credits to a link transmitter (claim 1); the link transmitter transmitting a packet to the link receiver, wherein the link transmitter takes the packet from one of the plurality of logical channels, and wherein the link transmitter selects from which of the plurality of logical channels to draw the packet (claim 1); diminishing the plurality of data credits as the packet is transmitted (claim 1); and the link receiver transmitting a flow control packet to the link transmitter to add additional data credits to the plurality of data credits (claim 1), wherein the link transmitter selects to which of the plurality of logical channels to allocate the additional data credits (claim 1).

9. For the similar claim language claim 1 of copending application 10/671,203 is also not patentably distinct from claim 10 of this application.

10. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Specification

The specification of the disclosure is objected to because for claims 19-27 the specification does not provide antecedent basis for the term "computer readable medium". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-28 rejected under 35 U.S.C. 102 (e) as being anticipated by Bloch et al (U.S. 6,922,408 B2).

13. As per claim 1 Bloch disclosed a method, comprising: providing a link transmitter having a plurality of logical channels(col.2, lines 24-28); providing a link receiver coupled to the link transmitter (col.2,lines 40-53); the link receiver providing a plurality of data credits to the link transmitter(col.3, lines 58-64); the link transmitter transmitting a packet to the link receiver, wherein the link transmitter takes the packet from one of the plurality of logical channels, and wherein the link transmitter selects from which of the plurality of logical channels to draw the packet (col.4, lines 58-67); diminishing the

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plurality of data credits as the packet is transmitted; the link receiver storing the packet in a plurality of receiver buffers (col.8, lines 13-51); the link receiver updating the plurality of data credits; and the link transmitter allocating the plurality of data credits among the plurality of logical channels (col.2, lines 1-23).

14. As per claims 2, 3, 13 & 22 Bloch disclosed the method of claim 10, wherein transmitting a flow control packet comprises notifying the link transmitter of an empty portion of a plurality of receiver buffers (col.1, lines 40-47).

15. As per claim 4 Bloch disclosed the method of claim 1, wherein updating the plurality of data credits comprises adding additional data credits to the plurality of data credits, and wherein the link transmitter selects to which of the plurality of logical channels to allocate the additional data credits (col.2, lines 53-67, col.3, lines 1-3 & col.26, lines 38-54).

16. As per claims 5, 11 & 20 Bloch disclosed the method of claim 4, further comprising if the plurality of data credits are diminished before receiving the additional data credits, the link transmitter ceasing transmitting to the link receiver (col.7, lines 15-25).

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17. As per claims 6, 12 & 21 Bloch disclosed the method of claim 5, further comprising wherein if the link transmitter has ceased transmitting, the link transmitter resuming transmission upon receiving the additional data credits (col.7, lines 15-25).

18. As per claims 7, 14 & 23 Bloch disclosed the method of claim 1, wherein the plurality of logical channels are a plurality of virtual lanes (col.1, lines 40-47).

19. As per claims 8, 15 & 24 Bloch disclosed the method of claim 1, wherein the link receiver providing the plurality of data credits comprises the link receiver providing the plurality of data credits at initialization of a switch fabric network (col.2, lines 1-23).

20. As per claims 9, 16 & 25 Bloch disclosed the method of claim 8, wherein the switch fabric networks is one of an Infiniband network and a Serial RapidIO network (col.2, lines 1-23).

21. As per claim 10 & 19 Bloch disclosed a method comprising: the link receiver providing a plurality of data credits to a link transmitter; the link transmitter transmitting a packet to the link receiver, wherein the link transmitter takes the packet from one of the plurality of logical channels, and wherein the link transmitter selects from which of the plurality of logical channels to draw the packet (col.2, lines 1-23); diminishing the plurality of data credits as the packet is transmitted (col.8, lines 13-51); and the link receiver transmitting a flow control packet to the link transmitter to add additional data

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credits to the plurality of data credits, wherein the link transmitter selects to which of the plurality of logical channels to allocate the additional data credits (col.1, lines 40-47).

22. As per claims 17 & 26 Bloch disclosed the method of claim 10, wherein one of the plurality of data credits represents one of the plurality of receiver buffers being ready to receive data (col.2, lines 1-23 & col.4, lines 58-67).

23. As per claims 18 & 27 Bloch disclosed the method of claim 10, wherein one of the plurality of data credits corresponds to one of the plurality of receiver buffers being empty (col.2, lines 1-23 & col.4, lines 58-67).

24. As per claim 28 Block disclosed the method of claim 1, wherein said transmitting the packet to the link receiver further comprises selecting the logical channel from the plurality of logical channels based on traffic conditions of the plurality of logical channels (col.2, lines 40-53)

Response to Arguments

25. Applicant's arguments filed 7/3/2008 have been fully considered but they are not persuasive.

26. Applicant on second paragraph of page 11, argued that in Block the “receiver” rather than the “transmitter” (as in applicant’s claim), selects a virtual from which of the plurality of logical channels to draw the packets.

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As to applicant's argument Block clearly discloses that the "receiver" **further transmits** the packets into the fabric. Therefore the receiver is also transmitting I.E it is also a "transmitter".

On col.2 lines 14 Block states:

15 and a receiver. The receiver has a buffer, in which it can hold data packets that it has received over the physical link before passing the packets through the switch to another of the ports for further transmission through the fabric. (When possible,

27. Finally, examiner advises the applicant to narrow the independent claim language to further the prosecution in this case.

Conclusion

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASGHAR BILGRAMI whose telephone number is (571)272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia L.M. Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. B./
Examiner, Art Unit 2443

/Tonia LM Dollinger/
Supervisory Patent Examiner, Art Unit 2443

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| <div><i>Application Number</i></div> <div></div> | Application/Control No. | Applicant(s)/Patent under Reexamination | |
| | 10/671,128 | WISE ET AL. | |
| | Examiner | Art Unit | |
| | ASGHAR BILGRAMI | 2443 | |